

Knowledge transfer and co-evolution of Japanese working practices in an emerging market economy

ABSTRACT

This paper explores the nature of the relationship between the local firm and its foreign owner in terms of knowledge transfer. Our focus is on the importance of absorptive capacity when setting HR policies and practices in an Asian emerging market economy, considering knowledge transfer both between parent and affiliate and into the wider local economy. We develop a model to broaden understanding of the significance and intensity of the relationship between the foreign and local firm, and we explore the co-evolution Japanese systems of work in Indonesia. The paper argues that the HRM practices influence knowledge transfer processes by improving absorptive capacity in the host country.

Keywords: Absorptive capacity, cross-border knowledge transfer, international HRM (IHRM), emerging market economy, agency and automotive industry

INTRODUCTION

There is a large body of literature investigating the nature of knowledge transfer between a parent firm and its foreign affiliates, and an equally extensive volume of research that explores knowledge transfer to local firms, usually through the lens of spillovers. Typically, this literature is quantitative, relying on broad proxies such as productivity from which we infer international knowledge transfer. We seek to unravel the complexities of this knowledge transfer by examining a unique study carried out from both the host and home country perspectives and incorporating both firms and institutions involved in knowledge transfer. Thus, this study strives to extend the existing literature in two ways. First, building on Minbaeva, Pedersen, Björkman, Fey and Park (2003), we focus on the role of human relations, institutions and the firms' existing absorptive capacity. Second, we consider the degree to which knowledge transfer in a local company with foreign investment facilitates the development of those parts of the business that are independent of foreign ownership. In this way, we explore not only the learning that occurs in the foreign-owned sector but also the importance of the local sector in this co-evolution of best practices. We argue that an exploration of the interactions between different ownership structures (Gaur & Delios, 2015) and various employees' abilities and motivations enhances our understanding of foreign interventions in local firms. Moreover, the research setting facilitates our examination of the absorptive capacity both within the foreign affiliate and within local establishments.

The data we collected offers a new perspective on absorptive capacity through the lens of International Human Resource Management ("IHRM"), as we investigate the causality of

varying degrees of absorptive capacity. Consequently, our study builds on the existing work of Minbaeva *et al.* (2003) on inter- and intra-organizational levels of analysis. Using unique primary data from a number of Indonesian and Japanese based cases, we are able to use the inter-organizational relationships between a Japanese parent and its local affiliates, and the intra-organizational relationships between an Indonesian parent and its subsidiaries (some of which also have foreign ownership), to examine local capacity and motivation to utilize new knowledge (Lane, Salk, & Lyles, 2001). This investigation is overlaid with an analysis of Japanese institutions that are seeking to facilitate “Japanization”.

The paper is structured as follows. First, the motivation for the research is examined with reference to relevant literature. Next, research questions are developed on: 1) absorptive capacity mechanisms under shared ownership structure; 2) the implication of human resource (“HR”) structures on employees’ abilities with respect to knowledge inflow; and 3) the use of HR aspects to probe employees’ motivation to adopt, assimilate and utilize new knowledge. The conceptual model and the methodology employed are then explained, concluding with a discussion of the results of the study.

MOTIVATION FOR THE RESEARCH

Since the early 1990s, broader and deeper theories of knowledge transfer of multinational companies (“MNC”) in emerging economies have been developed, while new problems and questions have arisen (Wright, Filatotchev, Hoskisson, & Peng, 2005). At the same time, however, the coverage of specific countries and regions has been uneven, and the understanding of knowledge transfer mechanisms and cross-border human resource management (“HRM”) practices remains subject to considerable debate (Foss & Pedersen, 2004; Dana Minbaeva,

Pedersen, Björkman, & Fey, 2014; Wright *et al.*, 2005). Adding to this literature, the retrospective by Dana Minbaeva *et al.* (2014) underscores the significance of the structure of HRM practices as drivers of absorptive capacity. They see these practices as promoting the employee's ability and motivation to facilitate knowledge transfer. However, they also acknowledge that this knowledge transfer has been a challenge empirically within the literature, since theoretically one needs to consider absorptive capacity as a dynamic rather than static construct (Dana Minbaeva *et al.*, 2014; Dana Minbaeva, Pedersen, Björkman, Fey, & Park, 2003). In our paper, we seek to fill this gap by broadening the understanding of absorptive capacity in three ways. First, we explore the context of absorptive capacity across firms with different organizational learning capabilities and HR structures. Second, we explore inter and intra-organizational analyses to investigate the causal relationship between HRM and knowledge outcomes, and we pay particular attention to Toyota, Honda and AOP's tier 1, 2 and 3 subsidiaries: companies demonstrating different logics in adopting, utilizing and applying Japanization (Dana Minbaeva *et al.*, 2014). Lastly, this paper examines the dynamic process of knowledge transfer by incorporating the capabilities of the knowledge sender and receiver. We distinguish between knowledge flows between JMNCs and locally owned firms, and intra-organizational flows involving AOP and its affiliates. This distinction facilitates a more detailed look at the nature of the dynamics of knowledge transfer from both the perspective of sender and receiver, building on the seminal analysis of Cohen and Levinthal (1990).

Moreover, international business ("IB") scholars have identified various compelling means of organizational control, motivation and capability-coordinating knowledge processes across emerging economy countries, such as China and India. Specifically, the continued development of HR infrastructure in emerging economies may have an impact on firms' absorptive capacity

(Fey & Björkman, 2001). Interestingly, despite the growing body of research on the differences in Asian knowledge transfer mechanism and IHRM strategies, there has not been significant attention paid to HR practices in Indonesia. Since the 1990s, Indonesia has been the largest Japanese foreign direct investment (“FDI”) recipient. It is also the largest Japanese automotive manufacturer and market in the Association of South East Asian Nations (“ASEAN”) region. Additionally, it is classified as one of the 13 most rapidly-growing developing countries and transition economies globally (Hoskisson, Eden, Lau, & Wright, 2000; Wright *et al.*, 2005). This study seeks to fill a gap in the literature by investigating how Japanese MNCs (“JMNCs”) diffuse knowledge from the MNC knowledge networks and how Indonesian subsidiaries assimilate and exploit new knowledge.

THEORETICAL BACKGROUND

To address these issues, we apply Minbaeva *et al.*’s (2003) theoretical framework for absorptive capacity to examine how HRM practices facilitate knowledge transfer. The applicability of Minbaeva *et al.*’s (2003) work to this study is in the formulation of HRM policies, procedures and practices central to international knowledge transfer and in the treatment of the firm as a black box. Thus, our theoretical model expands on previous work, as it is informed by the organizational learning literature and multi-analytical organizational exploration.

Inter- and intra-organizational of absorptive capacities

This study extends Minbaeva *et al.*’s (2003) concept and mechanism of absorptive capacity to contextualize the role of subsidiaries in the process of inward knowledge diffusion and assimilation (Floyd & Lane, 2000; Holm & Pedersen, 2000; Zahra & George, 2002).

Conceptually, the emphasis is on mechanisms that improve the subsidiary’s employees’ abilities

and motivation to adopt new knowledge (Lenox & King, 2004), and on subsidiaries' HR management practices that facilitate knowledge inflows from the JMNC, using formal inter- and intra-organizational tools (Kurokawa, Iwata, & Roberts, 2007; Van Wijk, Jansen, & Lyles, 2008). Minbaeva *et al.*'s (2003) concept is applicable to this study because, while inter-organizational knowledge networks and the structure of subsidiaries' HR practices vary, inter-human relationships must remain at a certain level to maintain knowledge inflows. Knowledge transfer mechanisms rely on individual and interpersonal interactions (Felin & Hesterly, 2007; Mäkelä & Brewster, 2009; Reiche, Harzing, & Kraimer, 2009). However, Minbaeva *et al.* (2014) emphasize that when these attributes are absent, knowledge transfer is limited. They speculate that weak interpersonal interactions, in turn, diminish ability, motivation and the opportunity for knowledge processes. Previous studies (e.g. Gupta & Govindarajan, 2000; Lane & Lubatkin, 1998) have found that the absorptive capacity of the receiving units plays the most significant role in knowledge transfer. In order to stimulate the adoption and diffusion of knowledge by their subsidiaries, MNCs must facilitate communication between organizational units. This mechanism may serve as an inter-human interface through which to share expertise and recognize the capabilities of Indonesian subsidiaries. The inter-personal interaction is what Minbaeva *et al.* (2014) postulate as the micro foundation of absorptive capacity, enhancing employees' motivation and their ability to interact to adopt and utilize knowledge.

Minbaeva *et al.* (2003: 587) define knowledge transfer as “a process of dyadic exchanges of knowledge between the source and recipient units consisting of initiation, implementation, ramp-up and integration”. The key theoretical application of this study is to provide an understanding of the role of subsidiaries in both acquiring and applying new knowledge. These are critical elements of knowledge transfer for organizational learning (Cohen & Levinthal, 1990; Minbaeva

et al., 2003; Gupta & Govindarajan, 2000), as they may lead to the development of new ideas, and hence new organizational behaviour. The essence of organizational learning is to bring about changes in organizational outcomes. Furthermore, Minbaeva *et al.* (2003) argue that some HR practices enhance organizations' creation and development of absorptive capacity. This involves managerial cognition, as well as individuals' abilities and motivation (Volberda, Foss, & Lyles, 2010). Minbaeva *et al.* (2003: 586) state that "subsidiaries differ in their absorptive capacity and this affects the level of internal knowledge transfer from other MNC units": a view shared by Cohen and Levinthal (1990) and Gupta and Govindarajan (2000). In our setting, this view leads to the well-known but often misused term of "Japanization". Thus, we seek to analyze the term "Japanization" through the theoretical lens offered by Minbaeva *et al.* (2003). We focus on a number of Toyota Production System ("TPS") elements, including Kaizen, *Genichi gembutsu* and *Gemba* (*go and see for real thing*), and 5S (*seiri* or sort, *seiton* or straighten, *seiso* or shine, *seiketsu* or standardize and *shitsuke* or sustain)¹ (Narusawa & Shook, 2009b). Examining various aspects of the TPS allows us to identify specific indicators of knowledge transfer in relation to HR. We use 5S and other TPS concepts, whose implementation abroad is supported by Japan's trade and foreign investment policy. This method seeks to embed, within a production process, approaches linked to overall competitiveness, with our focus being on HRM practices. Therefore, we aim to move the debate from one concerned with simply capturing the extent of this phenomenon, to one concerning the nature of knowledge assimilation and potential competition, not merely between foreign and domestic companies but between different elements of conglomerates with different levels of foreign holdings.

¹ Kaizen Institute, <https://uk.kaizen.com/knowledge-center/what-is-5s.html> (accessed: 6 February 2017).

Applying the concepts of ability and motivation to the JMNC joint-venture context of this study, we expect that greater knowledge utilization will be achieved if Indonesian subsidiary employees have both the ability and the motivation to acquire Japanese types of knowledge and skills to perform tasks in their organizations. This leads to the following research question (“RQ”):

- RQ1. How do inter-organizational interactions exert an impact on employees’ ability and motivation to stimulate knowledge transfer?

Organizational learning in inter- and intra-organizational levels

According to Cohen and Levinthal (1990: 128), absorptive capacity is “the ability of a firm to recognize the value of new, external information, assimilate it and apply it to commercial ends”. Extending this concept, Lane, Salk, and Lyles (2001) suggest that absorptive capacity is the ability to *apply* new knowledge, as distinct from merely understanding and assimilating it. We identify that knowledge inflows from Japan occur both within and between firms. For example, we identify knowledge transfer between the Japanese parent and its affiliates and also local firms. Furthermore, we are able to explore knowledge transfer within firms that are Japanese/ Indonesian joint ventures, but which have affiliates with no foreign investments themselves.

Systematic social integration: inter-organizational MNC knowledge transfer networks

Zahra and George (2002) state that a firm’s dynamic capability for a high level of absorptive capacity is the result of high organizational knowledge coordination across the organization and its sub-units. However, knowledge transformation and exploitation capabilities are enhanced by systems and social integration (Volberda *et al.*, 2010). In particular, systemic social integration is the result of established inter-organizational and inter-human relationships that promote the subsidiary’s absorptive capacity. This is because systemic social integration may relate to a

capacity for knowledge assimilation and exploitation. Van Wijk *et al.* (2008) discuss inter-organizational networks in supply chain settings. For instance, how do (intra-organizational) supply chains gain access to knowledge so as to facilitate learning processes and increase competitiveness? This question is particularly relevant when one considers that firms operating within the value chain of the Japanese “parent” are themselves competing with each other. Additionally, affiliates of the same local conglomerate (some with Japanese investment, some without) also compete for both internal resources and external markets. Hence, we argue that systemic social integration may supplement a local firm’s less dynamic capabilities within MNC supply chains.

HRM practices promote employees’ ability

This research examines the interactive effect of certain HRM practices that lead to the employees’ ability (Minbaeva *et al.*, 2003) to adopt new knowledge or Japanization. Building on Aguilera (2007) and Minbaeva *et al.* (2014), we posit that a series of causal relationships exist between the intended HRM practices of employee participation and knowledge sharing engagement in the organizational units, which in turn influence knowledge based performance (Aguilera, 2007; Dana Minbaeva *et al.*, 2014). Also, we explore the implications of the adoption of various facets of Japanization for HR practices. Hitherto, the literature in this area has focused on the broad concept of “Japanization”. However, in order to appreciate the complexities of HRM and knowledge transfer together, one needs a more nuanced approach (Minbaeva *et al.*, 2014). To illustrate, the Japanese work organization philosophy of 5S promotes employees’ motivation and commitment by empowering them in their day-to-day working practices. Therefore, we aim to extend the existing analysis by focusing on particular facets of these

learning processes while underlining the important role of inter-human relationships in interactions between the JMNC and its Indonesian subsidiaries.

Given the nature of the shared-ownership relationship, IHRM practices entail cross-organizational training programmes, including management and non-management employees and union/employee representatives. The training agenda covers technical and non-technical training conducted in various settings, from Japanese manufacturing sites to management offices both within and outside Japan. The comprehensive training investment and agenda stress that trainer–trainee interactions may shape inter-human relationships (Jansen *et al.*, 2005; Lichtenthaler, 2009).

It is important here, however, to delineate the context of our study. The Indonesian subsidiaries also have HR policies and practices, and the Indonesian HR managers engage with trainees to utilize their newly acquired Japanese skills and knowledge in a practical context. This is yet another layer of inter-human relations affecting interactions between employees' ability and motivation. It suggests that the adoption of Japanization by Indonesian subsidiaries results from inter-human relationships across organizations, influencing employees' ability and motivation (Jansen *et al.*, 2005; Lenox & King, 2004; Lichtenthaler, 2009). This prompts a question concerning the mechanisms through which Indonesian subsidiaries' level of absorptive capacity to acquire and adopt Japanese skills and knowledge are developed through inter-human and inter-organizational relationships. Thus, the following research question is raised:

- RQ2. How does training in inter-human relationships promote and shape subsidiary employees' ability to adopt new knowledge?

HRM practices promote employees' motivation

Another fundamental aspect shaping organizational learning is the structure of knowledge utilization. According to Pfeffer (1998), mechanisms for the influx of knowledge are important in motivating employees to use their acquired knowledge in the best interests of the organization. In the context of Japanization, trust is perceived as a fundamental element of employees' motivation. Strong motivation is based on feelings of trust in inter-human relationships. HRM practices, including internal promotion, performance appraisal and performance-based reward systems, are simply mechanisms for motivating employees to contribute their skills and knowledge to the organization. In other words, the essence of such HRM practices is the expectation of a positive relationship between organizational systems and employee effort, thereby providing strong motivation for employees to use their knowledge and skills to their full potential (Minbaeva *et al.*, 2003; Pfeffer, 1998).

Indeed, the interaction and trust in inter-human relationships between management and employees is valuable in shaping employee motivation (Van Wijk *et al.*, 2008). This is a second element in the concept of absorptive capacity. Minbaeva *et al.* (2003: 591) maintain that "extensive intra-organizational communication is more likely to contribute to employees' motivation". This study argues that while Japanization skills and knowledge may have a positive impact on employees' careers and promotions with respect to organizational learning, behaviour and change, it is trust that more likely serves as the motivator in the adoption of Japanization. Since Indonesian subsidiary employees must have a certain level of commitment and understanding, we contend that when the JMNC and Indonesian subsidiaries share the company strategy and performance with their employees, the employees' trust may be fostered. Hence, this study analyses (i) the structure of intra-organizational communications, and (ii) the implications of relationships between management, employees and union representatives for

employees' motivation to adopt Japanization. It is suggested that JMNCs' engagement in internal communications with subsidiaries' employees promotes inter-human bonds. This notion leads to the following research question:

- RQ3. How can inter-human relationships promote trust and open communication, thereby shaping employees' motivation in adopting new knowledge?

A theoretical development model of absorptive capacity is presented in Figure 1.

Insert Figure 1 about here

RESEARCH SETTING

The setting for our study was the JMNC automotive manufacturers cross-sector, which was appropriate for the following reasons. This sector provides an opportunity to discuss an empirical case study appropriate for developing a theoretical understanding of absorptive capacity. We are able to treat absorptive capacity as an independent category while investigating how inter-human interfaces influence knowledge inflows and knowledge networks at inter- and intra-organizational levels. This multidimensional analysis allows the influence of a firm's internal structure on its absorptive capacity to be operationalized (Minbaeva *et al.*, 2014). The data collected from MNC actors across sectors, and knowledge transfer agencies across borders enable us to conduct an in-depth examination of the mechanism of absorptive capacity in three automotive subsidiaries in an Asian emerging market economy setting: Toyota, Honda and AOP. These subsidiaries have dynamic capabilities for knowledge transfer and coordination, propelled by different degrees of Japanese ownership.

Toyota, Honda and AOP are subsidiaries of the Astra International Automotive Group (see Figure 2). In Toyota, Honda and AOP, inter-organizational relationships between the MNC and subsidiaries vary in several ways, including the degree of the Japanese partner's capital investment, length of presence and management involvement. However, there is less variation in intra-organizational relationships between Astra and Toyota, and Honda and AOP. Consequently, these interactions between different ownership structures and different organizational characteristics provide appropriate case studies through which to investigate the proposed research questions, and consider different mechanisms of knowledge inflow across the automotive sector. The selected case study subsidiaries have an MNC HQ in Japan and a local parent firm in Indonesia, with varying degrees of Japanese involvement across its subsidiaries. They were chosen for the study because they represent a reasonably diverse sample in terms of their capacity to absorb new knowledge and HR practices.

Insert Figure 2 about here

The six selected AOP subsidiaries have different levels of Japanese ownership and length of presence (see Figure 3).

Insert Figure 3 about here

Data collection

Data were collected through video-call interviews, followed by face-to-face interviews, study groups and on-site visits to the firms and plants in Japan and Indonesia. The interviews and study group sessions were conducted in Bahasa Indonesian, Javanese, Japanese and English. To maintain the rich authenticity of the content, the data were initially analyzed in the native

language, while the results are presented in English. The objective of each data collection phase was to understand the structure, applicability and implications of inward knowledge transfer, and to contextualize the research. The main HR participants were selected based on their knowledge, views and experiences of managing HR in their firms and undertaking HR training in Japan. The selection of employees was based on their technical and non-technical training experiences and implementation of Japanization, while agency participants' selection was based on their involvement and experience in facilitating training for Indonesian subsidiaries. Of the 65 participants, 50 had participated in technical and non-technical training on Japanization in Japan, Thailand and Indonesia. The training included HR, employee relations ("ER"), management, leadership, organization and communications.

While the focus of this study is the organization *per se*, in order to triangulate our findings, we also conducted interviews with other stakeholders—namely, the unions and the employers. We therefore collected data from union bodies², the Indonesian Trade Union Confederation, and union representatives within the firms. Interviews were also conducted with members of the Indonesian Employers' Organization (APINDO). Equally, the Overseas Human Resources and Industry Development Agency (HIDA) and the Employer Association of Indonesia (APINDO) focus on training and promoting knowledge transfer into the local economy which supports the JMNC. In addition to HR professionals, business managers, employees and unions, and representatives of Japanese and non-Japanese agencies were interviewed. We obtained data from the International Labour Organization (ILO), the Japan Trade Organization (JETRO), the Institute of Developing Economies (IDE-JETRO), and HIDA. These agency participants had

² The All Indonesian Workers Union Confederation (KSPSI), and the Confederation of Indonesian Metal Workers (KSPMI)

experience in facilitating and/or had been involved in Japanese-model HR-ER training for Japanese and Indonesian participants. Figure 4 summarizes the two phases of data collection and relevant interviews for this study.

Insert Figure 4 about here

Methodology

Our analysis seeks to explore the relationship between knowledge transfer and HR practices. The triangulation and reliability of this study rest on the selection, operation and collection of data gathered from various participants, including management, employees, union and agency representatives (Eisenhardt, 1989).

Coordination of knowledge diffusion

Both the JMNC and its Indonesian subsidiaries have agencies for inter-organizational knowledge transfer networks, e.g. HIDA and APINDO. HIDA's objective is to facilitate the application of Japanization in the local environment. Inter-organizational knowledge transfer networks are the result of inter-relationships and coordination between MNCs and these agencies. Such coordination between the JMNC and Japanese agencies, and between the Indonesian subsidiaries and international agencies, also improves local absorptive capacity. This occurs through inter-organizational relations and the coordination of knowledge transfer seeking to improve local employees' abilities. This is consistent with viewing knowledge transfer as a facet of the social integration of knowledge exchanges (Cohen & Levinthal, 1990).

FINDINGS

Inter- and intra-organizational interactions (RQ1)

The interview data highlight the vital role of commitment, ability and motivation in the adoption of the TPS. The data confirm that the higher the foreign capital and presence, the higher the level of absorptive capacity, which in turn has a positive impact on the adoption of new HR practices.

A Honda HR director shared his view on the applications of TPS's elements:

The 5S also serves as an IR tool in Honda. It can be applied beyond the shop floor and technical environment. It is applicable and implemented in Honda's HR practices (March 2015).

Another added:

Much of Japanization, e.g. 5S, Kaizen, Gembutsu, etc. can be adopted and expanded to other areas of business management, such as communication, HR and IR practices (AOP HR manager, March 2015).

Also:

The impact of implementing 5S is beyond technical; it has fundamental work organizational skills which can be applied beyond the shop floor [manufacturing]. It can reshape workers' mentality, discipline and understanding in the organization (AOP-Kayaba, March 2015).

These views illustrate the positive effects of inter-organizational interactions for absorptive capacity and knowledge transfer. The case of Toyota Indonesia suggests that higher foreign capital creates more extensive JMNC-subsidiary interactions, resulting in strong absorptive capacity. Toyota Japan's 95 per cent stake and 45-year presence may contribute to Toyota's positive working conditions and IR practices. Interviewees³ acknowledged that the working conditions on Toyota's production lines are better than those of the Indonesian national average.

³ Toyota, Honda, AOP, APINDO, JETRO, JETRO-IDE and HIDA participants.

Primary and secondary data also reveal that Toyota has experienced almost no industrial action. In fact, any action that has occurred has been solely to demonstrate solidarity. Toyota's employment structure and IR record surpass those of Honda and AOP, which have lower Japanese ownership, management involvement and presence.

Cognitive and relational levels of foreign capital, management involvement and presence positively promote inward organizational knowledge transfer. The data indicate that Toyota, Honda and AOP's dynamic organizational knowledge transfer capacity is contingent on the degree of foreign ownership, management involvement and presence. Furthermore, firms that have higher levels of these three bundled attributes invest more in training, and have superior working and employment conditions, resulting in stronger work performance. According to an AOP-Aisin Union leader:

From the Indonesian perspective, the Japanese firm has gained trust. It is a good foreign company because it complies with local rules, policies and regulations. Moreover, the Japanese regard employees as assets and the union as a partner –a very contrasting view from local Indonesian and non-Japanese firms [i.e. the Korean firm Samsung in particular] (November 2014).

Moreover, higher foreign ownership results in more investment in training and skills development as well as knowledge resources. As indicated, Toyota has the largest Japanese ownership of the companies surveyed, and has greater Japanization than Honda, which is only half Japanese-owned. Similarly, AOP subsidiaries with higher levels of Japanese capital (e.g. Denso, Aisin, Federal Nittan and Kayaba) have higher levels of Japanization than firms with no Japanese ownership (e.g. Adiwira Plastik and Indokarlo). Data from the six selected AOP case studies confirm that Adiwira Plastik and Indokarlo demonstrate less Japanization, and their

conditions of work, employment and employee relations are less harmonious than the conditions at Denso, Aisin, Federal Nittan and Kayaba. One interviewee said:

The characteristics and conditions of AOP's subsidiaries are very dynamic in many forms, not only their capital and resources but also their workers, union and joint venture arrangements (AOP union steward, November 2014).

This finding suggests that the levels of Japanese ownership, presence and management involvement influence the degree of a company's absorptive capacity and are perhaps attributable to the accessibility of knowledge resources. As another interviewee put it:

With a higher proportion of Japanese stakeholders, the workers and unions experience greater access to training, mentorship and open-communications with the Japanese (AOP-Denso, March 2015).

Toyota's higher level of Japanese ownership results in its increased absorptive capacity to acquire and apply Japanization. Similarly, within AOP subsidiaries, all four Japanese joint-venture firms exhibit greater Japanization and their employees exhibit greater ability and motivation than do those of Adiwira Plastik and Indokarlo. The AOP cases provide a more detailed understanding of the two stages of knowledge transfer within the co-evolution process. We are able to observe not only knowledge transfer into the organization from the JMNC partner, but also knowledge transfer within the organization to other affiliates with no Japanese investment. In addition, there is evidence of this cross-affiliate knowledge transfer process crossing tiers. AOP has over 34 subsidiaries organized in three tiers of activity. Tier 1 has the highest rates of Japanese investment and involvement, while tiers 2 and 3 rely on an indirect transfer of knowledge, particularly from Japanese inward investors whom they supply, as well as from other parts of AOP through informal mechanisms. The lower the firm's position in the

supply chain, the more important these informal mechanisms become to it. Similarly, relationships with Japanese agencies (such as HIDA) that facilitate organizational learning, human capital development and knowledge resources for innovation within local suppliers become paramount for low-tier firms. Analysis of the AOP case suggests that this systemic social integration of Japanese institutions offsets some of the disadvantages in acquiring knowledge that are experienced by tier 2 and 3 firms.

Hence, Japanese knowledge and work systems are key drivers of competitive advantage for both foreign affiliates and local firms, as illustrated by the case of Astra. Astra's subsidiaries face both internal and external competition. One solution to this challenge has been for these subsidiaries to improve management practices by fostering their business relationships with JMNCs.

However, this effort is easier for tier 1 suppliers. As one interviewee stated:

In Astra, it has been known that AOP has experienced the most complicated and tough HR/IR issues, yet AOP does not have the resources and qualified manpower to do the job. AOP realizes that it has been experiencing some shortcomings which have an adverse impact on trust and relationship building with union and workers. In particular, this applies to lower tier [Tier 3] and non-joint-venture types of firm (AOP HR Manager, March, 2015).

Firm level analysis in this area has focused on the importance of firm size in determining absorptive capacity. Van Wijk *et al.* (2008: 844) maintain that organizational characteristics may contribute to the capacity of an organization to absorb knowledge. Larger subsidiaries with the capacity of knowledge resources provide opportunities for employee to create, retain and transfer knowledge (Minbaeva *et al.*, 2014). However, building on Bresman, Birkinshaw, and Nobel (1999), we argue that what matters is the quality of the knowledge transfer relationship. The quality of knowledge transfer mechanisms enables Toyota to innovate with the TPS, and apply

Japanization to Indonesian labour markets. As a result, the Indonesian automotive firms gain knowledge to facilitate competition both at home and abroad, backed up by the sign “Made by Toyota.” Toyota’s mechanisms for organizational knowledge transfer are superior to those of Honda and AOP, particularly in the quality of acquisition, implementation, and integration of knowledge. A Toyota HR manager said:

It is not unusual for our management to be invited by Astra to design the HR training and ER framework for Astra (March 2015).

A Japanese representative added:

In Toyota, I observed the breadth and depth of Japanese work practices applied in the workplace (December 2014).

A former Toyota production manager said:

Astra’s training framework is adopted from Toyota; our firm has always been actively involved with the development of Astra’s HR and ER infrastructures. Toyota has been at the forefront of Astra’s achievement ... and even developed a case study based on ours (December 2016).

Toyota demonstrates stronger capability and use of absorptive capacity than Honda and AOP. The literature (Gupta & Govindarajan, 2000; Van Wijk *et al.*, 2008) also suggests that Toyota may have a competitive advantage over Honda, thanks to its ability to acquire, retain and exploit new knowledge. Even so, the level of Japanese ownership does not have a direct impact on the structure of subsidiaries’ HRM practices and policies. This is because Indonesian joint-venture regulation prohibits JMNCs’ involvement in these areas. Consequently, Toyota, Honda and AOP manage their own HRM processes in distinct ways, with various implications for work and ER.

Moreover, the structures of their inter- and intra-organizational knowledge networks support their discrete absorptive capacities. The JMNC's *indirect* involvement, in terms of training, previous knowledge and expertise (Minbaeva *et al.*, 2014), and Astra's *direct* involvement in setting HR principles, guidelines and frameworks for the independent subsidiaries, provide a deeper understanding of Cohen and Levinthal's (1990) concept of distinct organizational absorptive capacities. In contrast to involvement in HR and ER, the data emerging from the three case studies suggest that the level of Japanese ownership has an impact on subsidiaries' knowledge resources, access and capabilities. Our analysis indicates that the inter- and intra-organizational interactions stimulate competitive dynamics and co-evolution of JMNCs work practices in Indonesia. Therefore, the findings positively support RQ1.

Training (RQ2)

The data emerging from these case studies suggest that the extent of foreign ownership of Indonesian firms correlates with those firms' levels of intensification and modes of inter-human relationship type of training. This finding supports Van Wijk *et al.*'s (2008) argument that structural, relational and cognitive capital may influence organizational knowledge transfer, regardless of the level of financial capital. The results support the notion that inter-human relationships facilitate the ability, motivation and capability of trainees to understand new knowledge, which is the essence of TPS, and its applicability to human behaviour and the quality of organizational learning beyond the manufacturing setting. The knowledge characteristics of TPS (tacit knowledge), training (shaping employees' mind-sets to fit the TPS context), and organizational factors (resources, investment and prior knowledge) in these case studies confirm that the human interface serves as a conduit for knowledge transfer. Likewise, face-to-face

training enables the firm to profoundly shape employees' understanding of Japanese work systems. In this context, inter-human relationships may be regarded as an organizational tool, and as such, our findings seem to suggest the seminal work of Nahapiet and Ghoshal (1998) in showing that inter-firm relationships override pre-training behaviour and norms in establishing trust, and therefore knowledge transfer—in particular, changing mind-sets. In addition, our findings substantiate the view that the degree of trust experienced by Indonesian subsidiaries from the JMNC increases the ability of Indonesian employees to exploit new knowledge. Finally, the JMNC-Indonesian subsidiary trust relationship promotes mutual organizational learning between MNCs and local subsidiaries.

Further examination of inter-human relationships in the context of different understandings of TPS between Japanese and Indonesian firms reveals a range of attitudes toward waste reduction and quality. Japanese and Indonesian interviewees reported different perspectives with regard to “waste” reduction. While Japanese employees perceive “waste” reduction in the context of eliminating waste, Indonesian workers view “waste” in terms of a waste of resources and capital. The essence of TPS is to eliminate waste (Narusawa & Shook, 2009a; Wood, 1991). For example, Indonesian workers view the replacement of safety equipment, unless they have serious defects, as a waste of resources. Indonesian interviewees commented that as long as there are no holes in work gloves or damage to equipment, they can still be used, so why replace them? This attitudes suggests that Indonesian workers' mind-sets may not be compatible with the TPS framework. This finding also supports Minbaeva *et al.*'s (2013: 58) view that the applicability of “individual behaviour and motivation issues vary with certain contextual factors such as mind-set” in relation to absorptive capacity. Indonesian workers' mind-sets reflect a lack of understanding of and subsequent reluctance to adopt the Japanese work system, even though

using proper tools and equipment promotes safety, productivity and performance. Therefore, the data suggest that an inter-human relationship approach to training may promote organizational learning, and enable the concept of waste reduction to be communicated, shared, promoted, and ultimately, understood. Additionally, the JMNC's and HIDA's training agenda, which emphasizes inter-human relationships, aligns with Cohen and Levinthal's (1990) argument that inter-human relationships are the key to disseminating knowledge across intra-firm networks. Furthermore, an inter-human knowledge approach may create strong relationships among workers, influencing their mind-sets so they are receptive to understanding Japanization and developing tacit knowledge (Dana Minbaeva *et al.*, 2003; Reagans & McEvily, 2003; Uzzi, 1999). In fact, the level of Japanese expatriates' exposure to inter-human relationships may shift Indonesian employees' mentalities to fit the TPS framework. This inter-human relationship type of knowledge transfer clearly supports RQ2.

Moreover, the data reveal that the JMNC and Astra share a commitment to implementing the essence of the Japanese mind-set and modifying the conventional Indonesian work mentality. The human interface affects trainees' understanding, capacity and motivation to use new knowledge in terms of product quality and innovation. Equally important, *sensei-seito* (mentor-mentee) relationships promote trust, thereby shifting Indonesian mind-sets in understanding Japanization. A former Toyota production manager of HIDA noted this point in his *sensei-seito* relationship with his subordinates:

They [subordinates] can learn and see the implementation of TPS of well-organized and good coordination by showing them the required ability and attitude (December 2015).

This finding underscores the importance of transferring TPS by applying a similar learning model through inter-human relationships which Indonesian employees learn from their *sensei* (mentor/master).

As Kogut and Zander (1993) state, knowledge transfer depends on the level of knowledge resources. Human interfaces may serve as a platform to facilitate the communication, interpretation and absorption of knowledge resources. This study found that the HIDA training model emphasizes human relationships, motivating employees to develop their capabilities. In HIDA Japan, Indonesian trainees attend training sessions with other trainees from different countries. Inter-human relationships between trainees appear to have a positive impact on Indonesian trainees' ability and motivation to adopt Japanization. As one Indonesian trainee reported:

I thought to myself that I must do my best; I felt more and more strongly that I must do something about the electricity in Indonesia (HIDA alumnus and former vice chairperson of the Association of Indonesian Automotive Industries, March 2015).

Another added:

The participants were from 12 different nationalities, and we shared information and experiences with each other; it gave me a much wider view [confidence] of how to build good relationships; and from excellent instructors, I obtained precious insights, such as Japanese management systems (HIDA alumnus and former Toyota production manager, November 2014).

These views indicate that inter-human relationship training has a positive impact on trainees' understanding and capability, thus firmly supporting RQ2. Also, interviews with both HIDA personnel and HIDA alumni suggest that an understanding of and commitment to Japanese work

systems are fundamental and are the ultimate objectives of the training. As one HIDA alumnus said:

Training in Japan [HIDA programs] seemed like a discovery journey [for me] ... Oh, this is the TPS! (HIDA alumni and former Toyota production manager, November 2016).

The above discussions underscore the influence of interactions on employees' abilities and motivation (Dana Minbaeva *et al.*, 2003). This suggests that inter-human networks of interaction between trainee and trainee, or trainer and trainee are conduits of knowledge transfer. It also means that inter-human interfaces promote a subsidiary's organizational learning (Gupta & Govindarajan, 2000) and trainees' skills and competencies (Grant, 1996), which may lead to organizational innovativeness (Zaheer & Bell, 2005). Indonesian interviewees indicated that, in addition to technical skills, they gained invaluable experience, including the confidence to communicate and share their aspirations with their Japanese counterparts. Such human interactions may reduce the complexity of absorptive capacity (Hansen, 1999; Lichtenthaler, 2009). This finding builds on the earlier analysis of Van Wijk *et al.*, (2008), showing that the presence of Japanese expatriates fosters closer relationships and facilitates the transfer of tacit knowledge (Van Wijk *et al.*, 2008). Thus, inter-human relationships constitute a significant factor in promoting subsidiary employees' ability and motivation to adopt Japanization. As the data suggest, human interfaces empower employees' understanding from within. Although the aim of JMNCs is to transfer its working practices to its own subsidiaries, their presence has encouraged knowledge transfer into parts of local firms that have no Japanese investment. Japanization is adopted, transformed and executed by Toyota and Honda meticulously, and is then taken up by local businesses. As Astra has seen the impact of adopting Japanization at

Toyota and Honda, it propels Astra to adopt and execute Japanization in its management practices and to implement it internally. As one interviewee reported:

In Astra, in particular Astra Automotive Group, there are Japanese companies. They bring a number of Japanese manufacturing cultures such as Kaizen, Gembatsu & Gemba, 5S, we adopted, and these cultures eventually have become a part of Astra system. These working culture [the Japanization] further internalized [transform] and crystallized [exploit] in Astra (Astra HR director, November 2014).

Another Astra employee commented:

The Japanese quality control is one of Japanization Astra adopted very well. It works well and applicable to ours. Since 1985, every year Astra conducts an innovation challenge, we called it "Inov-Astra"[Astra Innovation]. This competition base on the collection of continues improvement or Kaizen. Astra held this competition internally, each subsidiary sends a small group of employees to represent their firms (Astra IR director, February 2015).

Astra clearly invested resources to adopt Japanization and they have used it to transform their organization. Not only are the Japanese work systems applicable and adaptable to the Indonesian context, but adopting and executing them have significantly improved Astra's performance. As one respondent noted:

Astra upholds Japanese international standard. Therefore, Astra has to follow, safeguard and maintain those standards. I can assure you that Astra's standard combines with Kaizen. However, despite all the manufactures, processes and services based on the Japanese standard, there are some specific areas that Astra wants to further challenge our employees by having an annual skill competency challenges within Astra organization (Astra IR director, February 2015).

The adoption of TPS by Toyota Indonesia offers an example of inter- and intra-organizational knowledge transfer. As the Indonesian trainees become local experts in TPS, they provide training to their fellow Indonesians in other Toyota subsidiaries. As a consequence, knowledge

flows in both directions, increasing local knowledge and also facilitating a better transfer and adoption of this knowledge by the inward investors. Indonesian interviewees confirm that their training experiences in Japan are codified in the Astra training program, particularly in regard to the applicability of different facets of Japanization to local firms. They also directly participate in designing and delivering training within the Astra automotive group. This intra-organizational knowledge transfer process is key to promoting intra-organizational capability. The training focuses on developing human capital. As a former HIDA trainee said:

The training in Japan administered by HIDA and Toyota Motor Japan [TMC] focuses on human capital development. It places human at the core of the system. This aligns with our values and respect people[employees]. By so doing, employees can work comfortably, following proper process and produce high quality international standard products (Toyota production manager, December 2016).

Similarly, Honda Japan has been present and involved in Honda Indonesia since 1971, but Honda has a different share of ownership composition compared to that of Toyota. However, Honda demonstrates a similar knowledge transfer mechanism. As one interviewee noted:

Honda has a 50:50 Japan-Astra stake. As an HR manager, I need to understand both the Japanese and Astra management. The Honda parameter is more towards Indonesia, so we use more Astra vibe as a reference, as guidance. But I need to consider the Honda production system. I have to make sure to align both, Honda and Astra. That is my responsibility (Astra-Honda Motor HR manager, March 2015).

Following Astra and Toyota management practices, Honda adopts 5S thoroughly. Honda adapts 5S to suit its context and extends it to “5S-2K”, that is, health and safety. Our data indicate that at the very beginning of the recruitment process, Honda introduces 5S-2K to new hires, and a core training module is offered to new and existing employees as part of HR. As another interviewee stated:

In Astra, 5S is adopted and extended. In Honda, 5S is more applicable to the “way of work”. Hence, it has become the foundation of Honda and extended to “5S-2K”. This is applicable to our need and we emphasize more on the safety and neatness aspects. If employees can maintain their workplaces safe and neat [healthy], then it is comfortable for us to do the job (Astra-Honda HR director, March 2015).

Toyota and Honda have similar knowledge transfer mechanisms. Moreover, it has become their competitive advantage. Their businesses are supported by subsidiaries who supply their auto parts. All six of AOP firms that form our case studies are Toyota and Honda suppliers. Astra, like Toyota and Honda, conducts HR-ER in-house audits within its subsidiaries, irrespective of their degree of Japanese ownership. All of AOP’s subsidiaries follow the same work organization requirements as Toyota and Honda. This intra-organizational systematic knowledge transfer mechanism even has an impact on local rivals, as Toyota and Honda,⁴ AOP’s biggest customers, instruct them to comply with their own HR-ER practices. By so doing, facets of Japanization proliferate within the Astra automotive group and throughout the automotive industry. As one interviewee said:

Since our customers, e.g. Toyota, Honda, Daihatsu, Nissan are heavily associated with Japanese, we are therefore very much influenced by their Japanese business management practices. For an example, Toyota, one of our stronger and biggest customers, imposed an audit on us. In order for us to maintain our business and relationship, Indokarlo must follow through with Toyota’s verification audit (Indokarlo HR manager, April 2015).

Indokarlo may have limited power to not follow Toyota’s internal audit verification process, but the interviewee stated that Toyota’s audit focuses on the supplier’s development and mentoring approach so as to ensure that they have systems in place to maintain Toyota and Honda quality standards. In addition, AOP subsidiaries have business visitors from Japan who come and check that the systems are being followed.

⁴ By market size, both Toyota and Honda are the biggest car and motorcycles productions in Indonesia respectively.

Another co-evolution of MNC practice is seen in Astra's rotation of its local HR management within its automotive group, including those who had undergone training in Japan. This HR rotation promotes organizational learning and benefits the non-JMNC AOP subsidiaries such as Indokarlo and Adiwira Plastic. As an interviewee reported:

It is not uncommon for managers or directors who have worked in Toyota, Honda and Astra transferred to AOP. Such as myself. First, I was working in Astra's H. Then I was transferred to Honda, and now I am in Indokarlo. There are a number of managers who have similar management careers within Astra (Indokarlo HR manager, April 2015).

Job rotation of Astra, Toyota and Honda trained employees within the AOP organization suggests that inter-human relationships serve as a mode of knowledge transfer at intra-organizational level. The co-evolution concept of inward knowledge transfer taken from the AOP context are twofold. First, Astra applies internal policy and managerial rotations. Astra places through AOP those HR managers with substantial experience of diffusing knowledge. Second, Japanese customers impose HR-ER system requirements on AOP, which are then audited. Therefore, the findings support RQ2.

Communication and trust (RQ3)

The data suggest that good internal communications are reflected in the establishment of management-union communications. The primary data reveal that they serve as the backbone to high-quality HR practices and ER. This finding supports Minbaeva *et al.*'s (2013) identification of specific organizational practices that facilitate knowledge transfer. Sharing and communicating the well-being of the company motivates employees to improve organizational performance and promotes trust, which enhances innovativeness (Zaheer & Bell, 2005). As echoed by Minbaeva *et al.* (2003), being provided or entrusted with information promotes

employees' commitment. Management–union communications are recognized by employees and unions as an element in establishing equal partnerships. As Van Wijk *et al.* (2008) point out, trust is a fundamental element in motivating employees. One HR manager commented on the importance of internal communications shaping the organization's quality of ER:

To maintain a harmonious relationship between union and management, first and foremost is communication: engaging in communication intensively every time we come across problems (AOP-Federal Nittan HR manager, March 2015).

Training opportunities in Japan enable Indonesian trainees⁵ to gain understanding and hands-on experience of the Toyota Way communications model. According to Minbaeva *et al.* (2013), it is an exposure approach that motivates individual employees by providing them with relevant knowledge, job-related experience and problem-solving skills.

These findings add credence to Cohen and Levinthal's (1990) assertion that inter-human relationship training is critical to knowledge transfer intensity. A higher level of Japanese investment and presence intensifies Toyota HR management's commitment to applying the model. Conceptually, the JMNC's strategy emphasizes the role of individuals in the organization in utilizing and exploiting new knowledge (Jansen *et al.*, 2005; Lichtenthaler, 2009). The primary data suggest that Toyota Indonesia invests capital and human resources in promoting, facilitating, and developing mechanisms for "Toyota Way" communications in its subsidiaries. This may be reflected in intra-organizational knowledge sharing (Dana Minbaeva *et al.*, 2003). Given the size of the firm and the resources devoted to knowledge transfer (Gupta & Govindarajan, 2000), the interview data suggest that Toyota has adopted the Japanese communications model much more rigorously than either Honda or AOP. In addition, Honda and

⁵ Management, employees and union representatives.

AOP have been impressed by the success of Toyota's management–union communications mechanism, and are consequently adopting this model as their own. In addition, Toyota interviewees reported that they are involved in designing Astra's code of conduct for communications. This illustrates the intra-organizational transformation and exploitation capability of new knowledge (Zahra & George, 2002).

The data indicate that higher levels of Japanese ownership bring an expectation of more communications training, resulting in better in-house manpower (e.g. employee commitment, skills, and knowledge). Japanese involvement in training employees varies, resulting in differing levels of employee commitment and capability when establishing management–union communications. Employees' abilities and motivation to adopt the Japanese way of communications may thus arise from the JMNC's investment and involvement (Lenox & King, 2004), and this may have an impact on knowledge flow (Kurokawa *et al.*, 2007).

The subsidiaries' HR and union communication forums are an appropriate context in which to examine the structure of management–union communications and their implications for employee motivation. Astra's HR and management communications platform aims to ensure uniformity of HR policies and practices across all Astra subsidiaries. Following the establishment of an HR forum, Honda and AOP established a union forum which is not exclusively for union and employee representatives. One respondent expressed the view that a union forum operates as a vehicle of communication for establishing management–union partnerships based on mutual trust:

From AOP's point of view, there is no legal basis for the union to form a forum; this is no more than an informal type of communication forum. AOP [management] or Astra have the authority to accept or reject it. When I was at Honda, there was a Honda union forum

group, also known as ASMO 1 Union. My thought was that we have to have some alliance (AOP-Indokarlo HR Manager, March 2015).

The establishment of the union forum was motivated by the existence of the Japanese model of communications, particularly in terms of an open management–union communications channel. Interviewees also stated that employees and employee representatives were inspired by the setting up of a Japanese union forum. The Indonesian trainees adopted the establishment of management–union communications as a way of demonstrating partnership and trust. This view has theoretical implications for organizational learning (Van Wijk *et al.*, 2008). In developing strong and trusting relationships, in particular where organizational boundaries are identified, management–union communications may foster close cooperation, thereby supporting knowledge transfer (Van Wijk *et al.*, 2008). Such is the situation at Honda and AOP.

Astra’s employees have also established a union forum. However, Astra management sees this development as a communications channel for unions rather than facilitating their involvement with HR management policies and practices. This potential dichotomy may complicate communication processes and hinder Japanization. In the union forum setting, all Astra automotive employees and unions share their HR-ER practices at the organization level. It is not unusual for employees and unions to offer guidance and advice based on their own experience or expertise from their own organization, e.g. Toyota, Honda and AOP. Thus, this finding adds granularity to earlier analysis of Hansen (1999) and Lichtenthaler (2009), who also identify the highly complex nature of absorptive capacity. Developing this point further, we are also able to distinguish here between inter- and intra-organizational interactions. While the JMNC was not directly involved in establishing a union forum, the data suggest that Honda (50% Japanese

owned) has taken a stronger lead and demonstrated greater ownership of and a stronger commitment to establishing a union forum than has AOP where Japanese ownership varies.

Furthermore, the data suggest that there are different levels of management–union communications in Indonesian subsidiaries. Toyota has experienced good management–union communications, and has built and maintained strong management–union communication channels. According to one respondent:

It is important to have open communications and establish communication channels between management and union (Toyota IR Director, March 2015).

Another added:

It has similiary been how we would have dialogue, communicate with the union, workers' representatives, then we have an 'employee voice' to deliver feedback. That has become the norm of this firm (Toyota HR manager, March 2015).

The implications of the Japanese management–union communications model have also been experienced by AOP-Aisin Indonesia. Management–union communications in Aisin are maintained at a good level, as indicated by one union representative:

Our mode of communication is transparent. We have a quarterly meeting with the director for discussion (Aisin union leader, November 2014).

Management–union communications work in Aisin because the HR management and the unions both follow an established management–union communications mechanism. Workers and unions value management commitment to establishing good communications, and the unions find it to be an equal partnership. This suggests a clear pattern of Japanese capital ownership and presence affecting Indonesian subsidiaries' management–union communications. Greater Japanese capital

ownership and presence have positive consequences for HR and union trust, and this commitment enables the firm to establish and manage its internal communications system. A consistent finding is that the level of Japanese ownership and presence shapes the orientation and mechanisms of local management–union communications. Thus, these findings support RQ3.

DISCUSSION and CONCLUSION

This study explores the importance of organizational learning, capability, and co-evolution of MNCs and local rivals in the emerging market economy. We extend existing theoretical models of absorptive capacity, exploring them at both inter- and intra-organizational levels of analysis. Our study finds that inter-human relations not only serve as a conduit for knowledge transfer, but are also an important characteristic of absorptive capacity. The analysis of the AOP cases demonstrates that Japanese work systems permeate to local affiliates, thus boosting absorptive capacity. Therefore, we conclude that the structure of subsidiaries' HR-ER practices is a significant element of an inter-and intra-organizational knowledge transfer mechanism.

Furthermore, we demonstrate the existence of two levels of absorptive capacity: direct knowledge transfer from foreign firms and spillovers into the wider economy. Ownership structures are important in this process, resulting in varying levels of organizational capabilities that promote, facilitate, or inhibit competitive dynamics. The AOP case illustrates the apparent tension between JMNCs and the objective of Japanese knowledge transfer agencies to promote Japanization in Southeast Asia. The situation at AOP indicates the extent to which this knowledge improves the performance of potential competitors. Many dominant firms in Southeast Asia have similar structures to AOP, with varying degrees of foreign involvement. However, what we have established here is that while the degree of Japanization increases in line

with the extent of the Japanese holding, there is potential for this trend to spread through the organization and into areas of the business that compete directly with the foreign partner. HIDA facilitates Japanization directly to the benefit of Japanese firms seeking improvement in their local suppliers. In turn, this process generates intra-organization knowledge flows, independent of Japanese links, increasing competitiveness in the wider sector.

The existing literature is rather vague. In this work, we have sought to offer new insights into the role of interpersonal interaction and intended HRM practices in explaining the mechanism of knowledge transfer from FDI. In line with the existing literature, the extent of ownership remains important, but informal channels and engagement with foreign institutions, such as HIDA training programmes, can overcome the lack of knowledge resources. The analysis of AOP highlights the degree to which knowledge transfer spreads through the complex and overlapping network of subsidiaries that characterize many large emerging market firms. Our findings suggest that, when seeking to facilitate knowledge transfer between inward investors and local firms, both MNEs and knowledge transfer agencies need to understand more thoroughly the nature of these cross holdings and affiliate networks, as co-evolution can quickly become competition. Thus, future research should look at the importance of a greater understanding in MNCs of the nature of emerging market firms. MNCs need to take into account internal knowledge transfer processes in order to facilitate knowledge transfer to their supply chains, while containing the knowledge as to limit dissemination to competitor firms. Our analysis has focused on certain forms of codified knowledge in terms of HR-ER policies and practices. However, it would be instructive to extend this analysis to, for example, less codified or technology-based knowledge.

Figure 1: Theoretical development of absorptive capacity

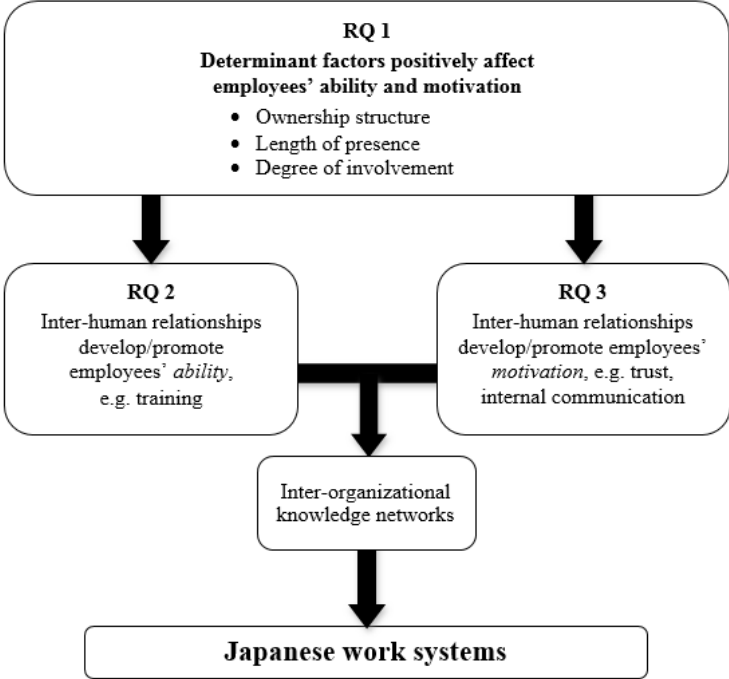


Figure 2: Toyota, Honda and AOP case studies

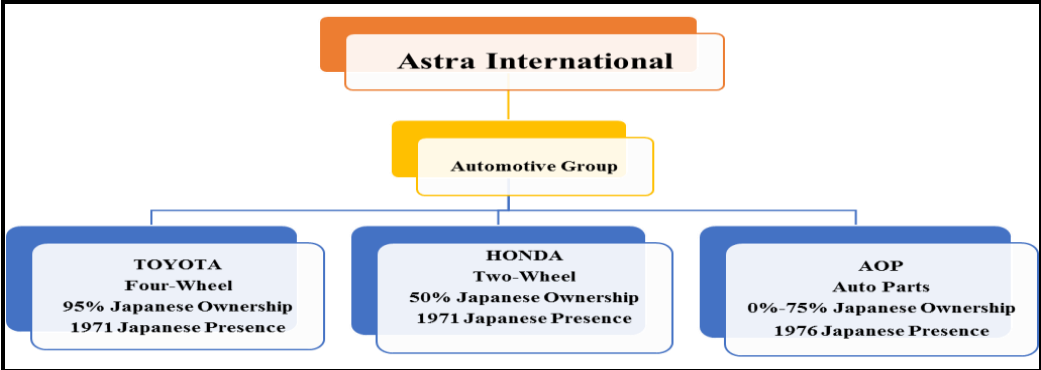


Figure 3: Japanese attributes in selected AOP subsidiaries

Firm	Japanese ownership	Japanese presence
Denso	75%	1978
Aisin	66%	1995
Federal Nittan	60%	1995
Kayaba	50%	1976
Adiwira Plastik	0%	-
Indokarlo Perkasa	0%	-

Figure 4: Summary of first- and second-phase data collection

First-phase		Second-phase	
No. of Participants	Organization	No. of Participants	Organization
10	Astra International	-	
25	Honda Motorcycle	0	Honda
6	Toyota Car	5	Toyota
25	Auto parts	5	Auto parts
15	Non/Japanese agencies & NGOs	5	Japanese expatriates & agencies

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